

Memorandum

Subject: Knox County

Block Farms, Inc.

**Swine Farrow to Finishing Facility
CAFO - Facility Inspection**

To: DWPC/FOs and RU

From: Todd R. Huson, DWPC-FOs, Peoria Region

Date: May 18, 2011

On May 18, 2011 a CAFO facility inspection was performed at Block Farms. This swine facility is located along Knox Highway 17 (SE of the intersection of 1700E and 1000 N) in Haw Creek Township, in Knox County (NW¼, Sect 13, T10N, R3E). The mailing address and telephone number are **Exemption 6 and Exemption 7(C)**

Western FBFM (Farm Business Farm Management) rents this facility from John Block. Western FBFM mailing address is **Exemption 6 and Exemption 7(C)**. Gene Shores is the farm manager and Lester Swise is the manure handling manager. Gene's telephone number is **Exemption 6 and Exemption 7(C)**. This facility has three full-time employees and three part-time employees. Lester Swise is a certified livestock manager. Gene and Lester were interviewed during this inspection. The weather was cool and cloudy. Bio-security procedures were followed.

General Information

Block Farms is a farrow to finish facility. The facility currently The number of sows at this site has been reduced in recent years from ~715 to ~350. These sows are bred on dirt lots and kept on open lots with shelters during gestation. The swine are transferred to confinement buildings for farrowing and finishing. The nursery, grower, and finishing unit currently have ~4,450 swine with ~2,640 >55#. The swine are finished from ~15# to market weight ~250#. This facility reportedly produces 8,000 to 9,000 swine annually. The majority of the swine are shipped to Tyson Foods (pork processing plant) located in Columbus Junction, Iowa (normally one semi-truck per week). Old sows and reject hogs are taken to the UPS buying station in Cambridge, Illinois. A~3,200 acre row-crop operation is also operated at this site.

Swine Production Facility

This facility consists of sixteen total confinement buildings and four barns/shelters with open feedlots. However, only nine confinement buildings and three barns/shelters are currently being utilized. Nine confinement buildings have ~7' deep pits, three buildings have gutter flush systems, one building has a combination gutter flush system and a 7' deep pit, and three buildings utilize straw bedding. The four barns/shelters with open feedlots also utilize straw bedding. The gutter flush systems drain into adjacent pits. This facility has a large equipment/maintenance building, a small maintenance barn, office/maintenance building, a small storage shed, and feed mill with numerous storage silos. Two total confinement units and two shelters with open feedlots are located at a remote site ~0.6 miles east of the main facility. The two confinement buildings have ~7' deep pits. However, only the shelters and open feedlots are currently being utilized.

Storm Water – Access Road

The structures do not have gutters or downspouts. The majority of the storm water runoff from the site drains to adjacent fields. No runoff problems were noted. These structures do not have perimeter drain tiles. An aggregate access road was provided to each structure.

Water - Power

Water is provided by seven on-site wells (one 100' deep well, one 150' deep well, and five shallow wells). Ameren-Clico provides 480-V, 3-PH, electrical power. This electrical service has reportedly been reliable. The facility also has an emergency generator dedicated to this site.

Heating - Ventilation

Ventilation is provided in these confinement units through a combination of roof vents, curtain walls/doors, wall fans, and pit fans. The finishing units have modified open fronts (walls). A geothermal tile system provides warm and cool air in three units. Hot water floor heating systems and natural gas unit heaters are also utilized in the nurseries and growers.

Feed - Additives

This facility operates a feed mill at this site. Feed rations consist of corn and soybean meal, with some DDG and lard (grease). The facility stopped adding Phatase (enzyme).

Specific Units**Gestation Facilities:**

The sows are bred on dirt lots and the majority of the gestating sows are kept on open lots (~200 acres) with small shelters. A small ~60' x 40' barn and ~60 x 40' shelter are utilized as late gestation units. The barn and shed are connected through several small open dirt/concrete lots. These gestation units utilize straw bedding. The manure/bedding from these floors is disposed as a solid waste. Some sows were previously kept in the small 22-sow, 35-crate, ~100' x ~20' gestation building. This building is connected to open concrete lot; however, this unit is currently not used.

Farrowing/Nursery and Grower Facilities:

The 24-crate (220-head), ~80' x ~40' farrowing house/nursery, the 28-crate (260-head), ~90' x ~50' farrowing house/nursery, and the 42-crate (320-head), ~120' x 50' farrowing house/nursery have gutter flush systems. However, only the 28-crate and 42-crate buildings are currently utilized. Wastewater generated in these structures is diverted into adjacent building pits for storage.

The combined ~190 x ~40' farrowing house/nursery and grower building contains a 42-crate (320-head) farrowing house/nursery section with a gutter flush system and a 340-head grower section with 7' deep pit (~0.2 MG). Wastewater from both sections is diverted to the building pit for storage.

The small 122-head, ~100' x ~40' slow grower building has a 7' deep pit (~0.2 MG). The large 1200-head ~170' x ~40' grower building has a 7' deep pit (~0.35 MG). Wastewater generated in these structures is diverted into the corresponding pits for storage.

Finishing Facilities:

The six 400-head, ~140' x ~40' finishing buildings have 7' deep partial pits (~0.09 MG). The 600-head, ~200' x 40' finishing building has a 7' deep pit (~0.13 MG) and the 800-head, ~260' x 40' finishing building has a 7' deep pit (~0.16 MG). The remote 400-head and 200 head finishing buildings also have 7' deep pits (estimated ~0.09 MG and 0.5 MG). The partial pits reportedly extend ~30% under the floors in these buildings.

Miscellaneous Units:

The small winter house/shed and 12-sow Bob Evans shipper house also utilize straw bedding on floors. The manure/bedding from these structures is disposed as a solid waste.

Wastewater and Manure Solids Storage/Treatment

Wastewater generated in the gutter flush units is diverted into adjacent building pits. These pits provide a total combined capacity of ~1.7 MG. Wastewater is transferred between the building pits to provide maximum storage and improve nutrient consistence during application. Manure and straw bedding is normally stored under roof until disposed as a solid waste.

Manure Management Plan

A manure management plan was developed by certified livestock manager, Lester Swise, for the disposal of wastewater and manure to cropland. This plan includes testing of wastewater and soils, and maintaining records of disposal operations. Wastewater disposal is based on fertilizer requirements associated with each application field. They typically haul to remote fields over more convenient local fields.

Soil - Manure Sampling

Soil samples are obtained on a 4-year cycle and analyzed by Crop Production Services. Fertilizer needs determine the application rate. Wastewater samples are reportedly sampled and analyzed during each application by Crop Production Services for nitrogen, phosphorus, potassium, and pH. The date, location, # acres, application method, and total gallons applied are recorded as per the management plan.

Block Farms (Swine Production Facility)

CAFO Facility Inspection

Wastewater and Manure Solids Disposal

Wastewater is land applied to cropland in the fall and spring. The pits are reportedly emptied. Some wastewater is occasionally applied to flat ground in the winter and to wheat fields in the summer. Wheat is specifically planted to provide this option. The facility has 2,500+ acres of available cropland within ~4 miles of the farm. Manure and straw bedding is applied on adjacent ground utilizing a manure spreader.

Wastewater is pumped from the building pits with a PTO pump directly into a Nuhn 6500 gallon application wagon with five injection knives. A Deere #4955 tractor pulls this wagon. This wastewater is normally incorporated into the soil through the injection knives. Wastewater is only surface applied to wheat ground in the summer and to flat fields in the winter. The facility reportedly applies ~2.5 MG each year. Based on this disposal rate and the ~1.7 MG maximum pit storage capacity, this facility has more than ~eight months storage (including the remote units).

Dead Swine Disposal

Dead swine are picked-up weekly by Schnowski's transfer service and taken to a rendering facility. Schnowske & Sons Rendering Service is located at 10507 Illinois Highway 82, Cambridge Illinois 61238, (309) 937-3323. The facility averages ~7 dead swine per week.

CAFO Designation/NPDES Permit Requirements

Block Farms farrow to finish facility is a large confined animal feeding operation, as defined by the clean water act.

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Att: Site Diagram

CC: Peoria Files


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